

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
28 July 2005 (28.07.2005)

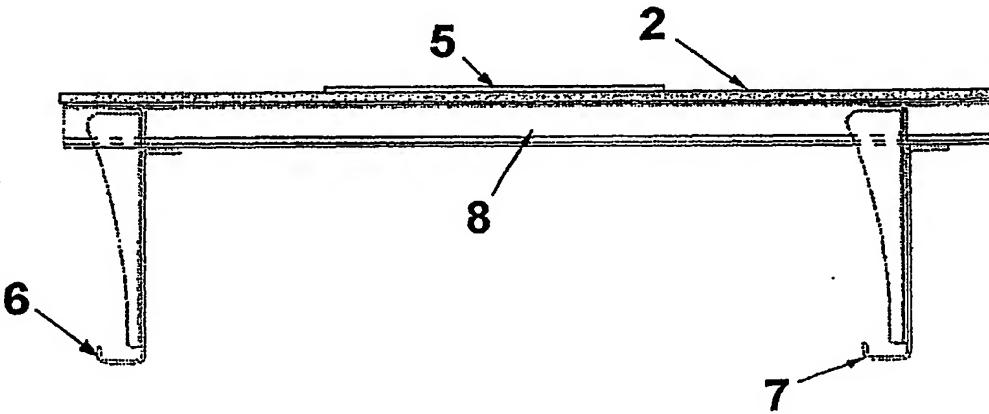
PCT

(10) International Publication Number  
**WO 2005/068289 A2**

- (51) International Patent Classification<sup>7</sup>: B64C 1/40,  
1/00, A62C 3/08
- (21) International Application Number:  
PCT/EP2005/000038
- (22) International Filing Date: 5 January 2005 (05.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10 2004 001 078.1 5 January 2004 (05.01.2004) DE  
60/600 105 9 August 2004 (09.08.2004) US
- (71) Applicant (for all designated States except US): AIRBUS DEUTSCHLAND GMBH [DE/DE]; Kreetslag 10, 21129 Hamburg (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MÜLLER, Rainer [DE/DE]; Emsener Strasse 16a, 21224 Rosengarten (DE).
- (74) Agent: KOPF, Korbinian; Maiwald Patentanwalts GMBH, Elisenhof, Elisenstrasse 3, 80335 München (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: FUSELAGE



A2

**WO 2005/068289** (57) Abstract: The fuselage according to an exemplary embodiment is conceived in such a way as to prevent the spread of flames produced by a source of fire and acting on the fuselage from outside the aircraft environment. The fuselage concept takes into account materials or material combinations that will scarcely allow protection of the cabin area of an aircraft (upon emergency landing) to be violated by flames spreading from outside the aircraft environment, which may facilitate an evacuation of passengers from the aircraft. An aircraft fuselage, whose fuselage structure, in addition to other structural elements that are components of the mechanical strength bracing of the fuselage and help absorb its forces, encompasses an exterior skin consisting of various respective materials, which are designed to be resistant to shear, and incorporated as a bearing element into the mechanical strength bracing to absorb and transfer the forces and torques acting thereupon. The exterior skin is fabricated from a burn-through resistant semi-finished material consisting of a non-metallic material or a fireproof metallic material, wherein the semi-finished material can be molded through further processing. Also, the exterior skin may be realized by a semi-finished material combining a nonmetallic material and a metallic material, wherein the produced exterior skin product is a hybrid material that can be molded and joined through further processing.



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *without international search report and to be republished upon receipt of that report*